

Claims

- [c1] 1. An integrated personal information management system, the system comprising:
a receptacle holding at least one paper page that is capable of receiving pen strokes from a digital pen;
a digital pen for recording pen strokes when a user writes on a particular paper page;
a page identifier for identifying the particular paper page on which the user is writing; and
a handheld personal information device in communication with the digital pen and page identifier for processing the recorded pen strokes associated with the particular paper page and displaying the processing results on a display screen.
- [c2] 2. The system of claim 1, wherein the paper page includes a particular dot pattern for use in conjunction with the digital pen for recording the user's pen strokes.
- [c3] 3. The system of claim 1, wherein said handheld personal information device displays information responsive to input written on the particular paper page with the digital pen.

- [c4] 4. The system of claim 1, wherein said handheld personal information device displays information related to a calendar date in response to a user writing on a particular paper page corresponding to the calendar date.
- [c5] 5. The system of claim 1, wherein said handheld personal information device includes at least one interface for wireless communication with other devices.
- [c6] 6. The system of claim 5, wherein the digital pen includes an interface for wireless communication with said handheld personal information device.
- [c7] 7. The system of claim 1, wherein said handheld personal information device converts pen strokes received from the digital pen to text.
- [c8] 8. The system of claim 7, wherein the text is displayed on the display screen.
- [c9] 9. The system of claim 8, wherein the text is displayed within a few seconds after the user has written on the particular paper page enabling the user to identify any necessary corrections to the text.
- [c10] 10. The system of claim 8, wherein the text is automatically displayed on the display screen of the handheld personal information device without requiring any addi-

tional intervening steps.

- [c11] 11. The system of claim 8, wherein the user may edit the text displayed on the display screen.
- [c12] 12. The system of claim 8, wherein in response to the user selecting text displayed on the display screen, alternative words are displayed.
- [c13] 13. The system of claim 8, wherein the text is displayed together with an image representing at least a portion of the particular paper page.
- [c14] 14. The system of claim 1, wherein the particular paper page includes areas for entering a selected one of appointments, tasks, calendar entries, contacts, and notes.
- [c15] 15. The system of claim 14, wherein particular information is displayed on the display screen in response to a user selecting an area of the particular paper page with the digital pen.
- [c16] 16. The system of claim 14, wherein said handheld personal information device creates a particular type of record in response to a user writing in a particular area of the paper.
- [c17] 17. The system of claim 16, wherein the particular type of record comprises a selected one of an appointment

record, a task record, an email record, a contact record, and a note record.

- [c18] 18. The system of claim 16 wherein a particular attribute of the record is defined in response to a user marking a designated area of a paper page.
- [c19] 19. The system of claim 1, wherein a user may search for information stored on said handheld personal information device by selecting an area of the particular paper page using the digital pen.
- [c20] 20. The system of claim 19, wherein the user may search for information by touching a handwritten entry on the particular paper page using the digital pen.
- [c21] 21. The system of claim 1, wherein information previously written by the user on the particular paper page on which the user is currently writing is displayed on the display screen.
- [c22] 22. The system of claim 1, wherein said page identifier comprises a sensing device connected to the handheld personal information device.
- [c23] 23. The system of claim 1, wherein said page identifier is a component of the digital pen capable of identifying the paper page on which the user is writing.

- [c24] 24. The system of claim 1, wherein the receptacle comprises a folder for mounting the paper pages and the handheld personal information device.
- [c25] 25. A method for displaying information at a portable device responsive to user input on a paper page, the method comprising:
providing at least one paper page, each paper page capable of receiving pen strokes made using a digital pen;
recording pen strokes made by a user on a paper page using the digital pen and a page identifier identifying the paper page;
transferring the pen strokes and page identifier to the portable device; and
generating information for display at the portable device based on processing the pen strokes and the page identifier.
- [c26] 26. The method of claim 25, wherein the page identifier establishes context for processing the pen strokes.
- [c27] 27. The method of claim 25, wherein said portable device displays input written by the user on the paper page with the digital pen.
- [c28] 28. The method of claim 25, further comprising:
determining a particular area of the paper page contain-

ing the pen strokes made by the user.

- [c29] 29. The method of claim 28, wherein a particular type of record is created in response to a user writing in a particular area of the paper page.
- [c30] 30. The method of claim 29, wherein the record comprises a selected one of an appointment record, a task record, an email record, a contact record, and a note record.
- [c31] 31. The method of claim 29, wherein a particular attribute of the record is defined in response to a user marking a designated area of the paper page.
- [c32] 32. The method of claim 25, wherein said transferring step includes using wireless communication.
- [c33] 33. The method of claim 25, wherein the portable device comprises a personal digital assistant (PDA).
- [c34] 34. The method of claim 25, wherein said displaying step includes displaying information related to a particular calendar date in response to a user selecting a paper page corresponding to the particular calendar date.
- [c35] 35. The method of claim 25, wherein said displaying step includes displaying an image representing at least a portion of a paper page containing user input entered by

the user on the paper page.

- [c36] 36. The method of claim 25, wherein said displaying step includes displaying particular information based on a particular area of the paper page selected by the user.
- [c37] 37. The method of claim 36, wherein said displaying step includes displaying information previously input by the user in a particular area of the paper page in response to the user selecting the particular area using the digital pen.
- [c38] 38. The method of claim 37, wherein said displaying step further comprises displaying information related to the information previously input by the user.
- [c39] 39. The method of claim 25, wherein said displaying step includes displaying feedback regarding the pen strokes made by the user.
- [c40] 40. The method of claim 25, wherein said generating step includes converting pen strokes received from the digital pen to text.
- [c41] 41. The method of claim 40, wherein the text is displayed to the user.
- [c42] 42. The method of claim 40, wherein the text is displayed within a few seconds after the user has written on

the paper page enabling the user to identify any necessary corrections to the text.

- [c43] 43. The method of claim 40, wherein the text is automatically displayed without requiring any additional intervening steps.
- [c44] 44. The method of claim 40, wherein the user may edit the text displayed at the portable device.
- [c45] 45. The method of claim 40, wherein in response to the user selecting text displayed at the portable device, alternative words are displayed.
- [c46] 46. A computer-readable medium having processor-executable instructions for performing the method of claim 25.
- [c47] 47. A downloadable set of processor-executable instructions for performing the method of claim 25.
- [c48] 48. A portable personal information device, the device comprising:
 - at least one paper page, each paper page containing printed areas for receiving pen strokes when a user writes using a digital pen;
 - a page identifier for identifying the paper page on which the user is writing;

a digital pen for recording pen stroke data when a user writes on the paper page and transferring the pen stroke data to a processing module;
a processing module for generating information for display based on processing the pen stroke data and the page identifier; and
a display module for displaying information generated by the processing module.

[c49] 49. The device of claim 48, wherein the paper page includes printed calendar information.

[c50] 50. The device of claim 49, wherein the paper page includes a selected one of appointments, tasks, emails, contacts, and notes.

[c51] 51. The device of claim 48, wherein the paper page includes a particular dot pattern for recording pen stroke data when a user writes on the paper page using the digital pen.

[c52] 52. The device of claim 48, wherein said digital pen transfers pen stroke data to the processing module using wireless communication.

[c53] 53. The device of claim 48, wherein said processing module generates information related to a particular calendar date in response to a user selecting a paper page

corresponding to the particular calendar date.

- [c54] 54. The device of claim 48, wherein said processing module retrieves information previously written by the user on the paper page when the user selects the paper page.
- [c55] 55. The device of claim 54, wherein said display module displays the information previously input by the user.
- [c56] 56. The device of claim 48, wherein said processing module converts pen strokes received from the digital pen to text.
- [c57] 57. The device of claim 56, wherein the text is displayed by the display module.
- [c58] 58. The device of claim 56, wherein the text is displayed within a few seconds after the user has written on the paper page enabling the user to identify any necessary corrections to the text.
- [c59] 59. The device of claim 56, wherein the text is automatically displayed by the display module without requiring any additional intervening steps.
- [c60] 60. The device of claim 56, wherein the user may edit the text displayed by the display module.

- [c61] 61. The device of claim 56, wherein in response to the user selecting text displayed by the display module, alternative words are displayed.
- [c62] 62. The device of claim 48, wherein the user may search for information stored on the portable personal information device by selecting an area of the paper page using the digital pen.
- [c63] 63. The device of claim 48, wherein the user may search for information by touching a handwritten entry on the paper page using the digital pen.